



↖ Challenges
in the ED





National Challenges

- High Acuity
- Increased census
- Holding in the ED
- Disaster Preparedness
- Financial Burden
- Staffing Shortage
- Space Deficiencies
- Operational Inefficiencies

Challenges in the **Emergency Department**



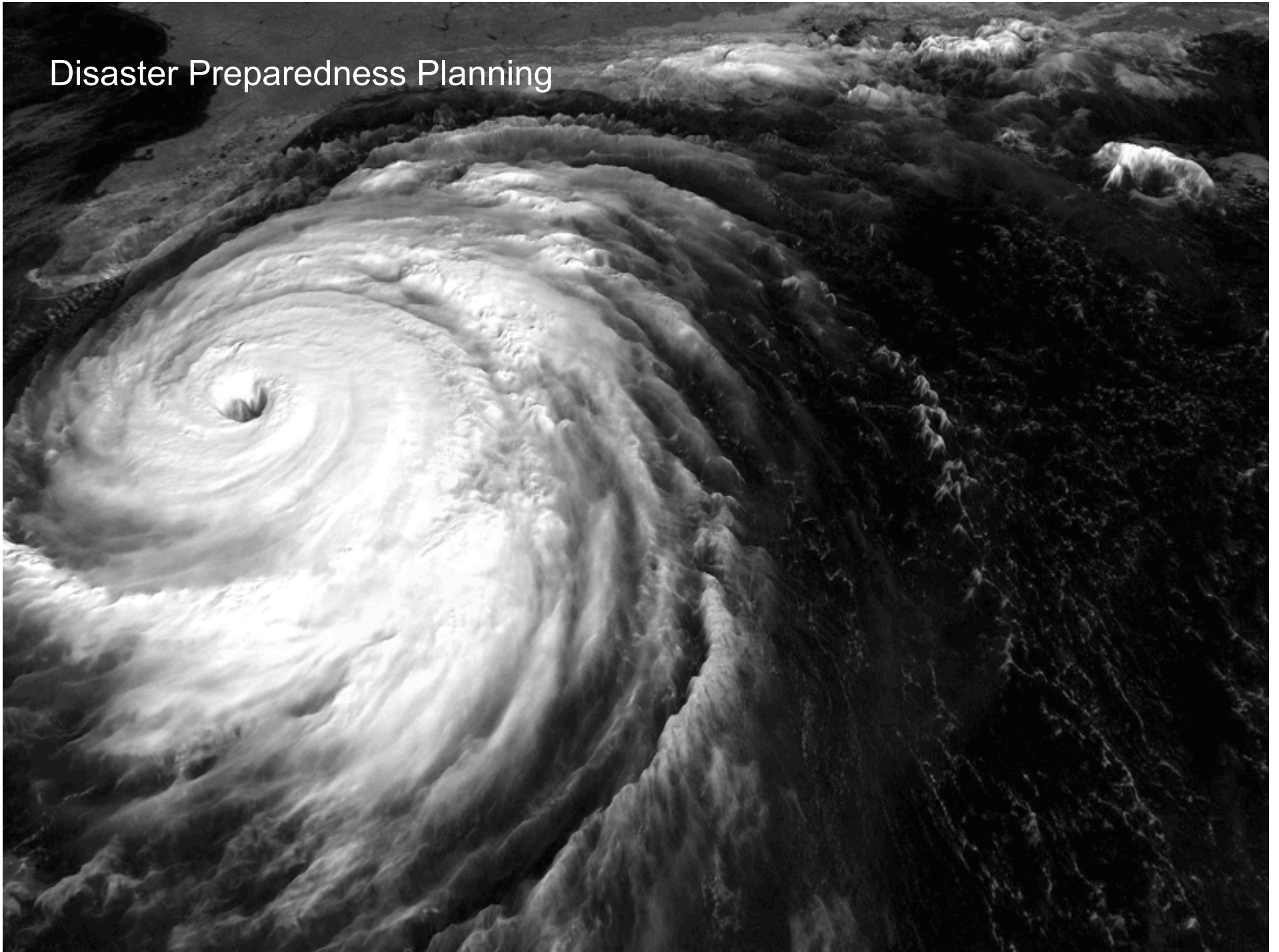
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Challenges to Address

- Patient throughput -
ALOS, LWBS
- Inpatient & Ancillary
Support
- Identify root causes of
bottlenecks
- Patient Safety & Quality
of Care
- Staff and Physician
Productivity
- Financial- supply cost,
bad debt
- Case Management-
frequent flyers

Challenges Emergency Department

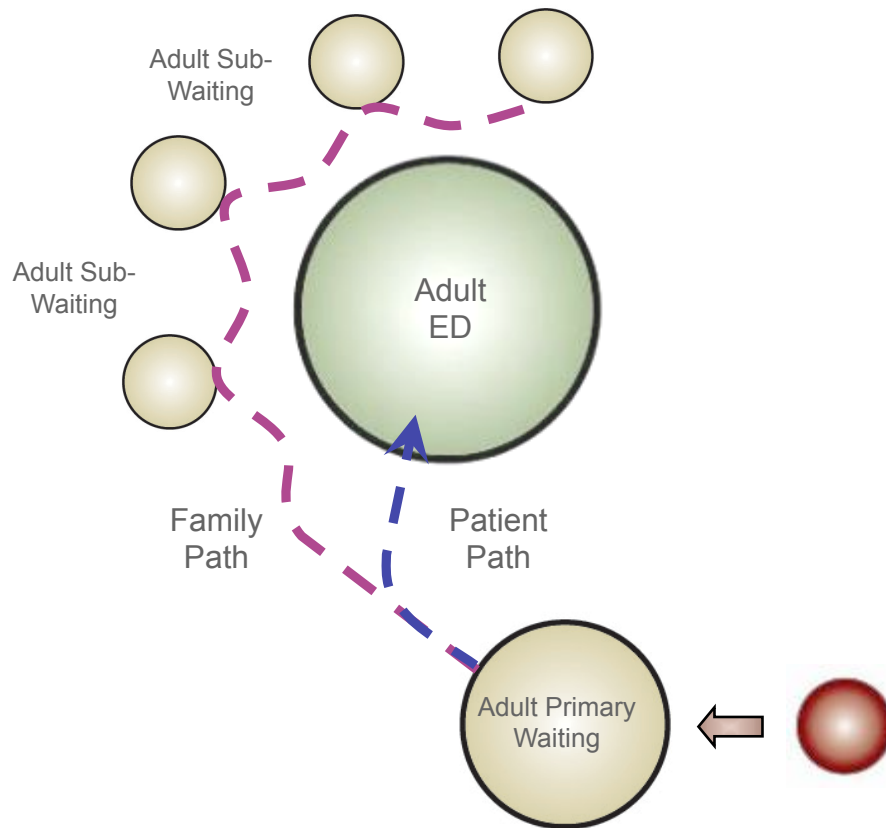
Disaster Preparedness Planning



Operational Planning
**Emergency
Department**



Operational Planning General Strategies



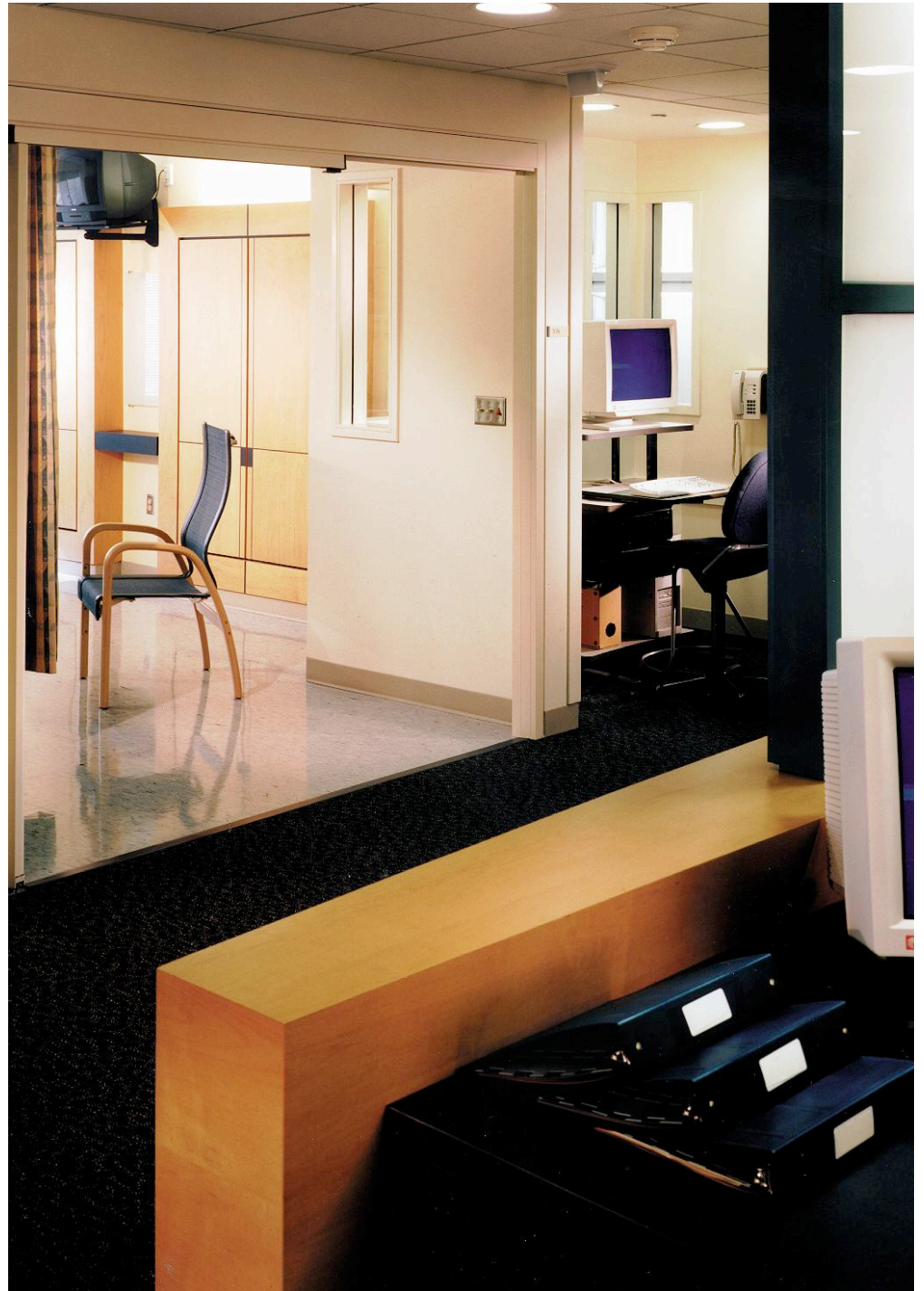
Operational Planning *Providing Lean Solutions*

- Interactive process that allows you to rethink and visualize the ideal process

Benefits:

- Promotes innovative solutions
- Ensures physical solutions and operational goals are in sync
- Builds consensus and ownership in solutions with staff

EXISTING WORKFLOW





Design Considerations

- First **impressions** are lasting
- Balance **privacy** of patients with observation need of staff
- Promote **flexibility** - design-in flexibility and adaptability so to limit remodeling and renovation over time
- Develop designs that enhance **efficiency** and reduce operating expenses through adjacencies that can reduce staff redundancy and travel time, provide flexible treatment space, and optimize computerization
- Reduce capital expenditures through **standardization** of casework, treatment areas, officing, and equipment

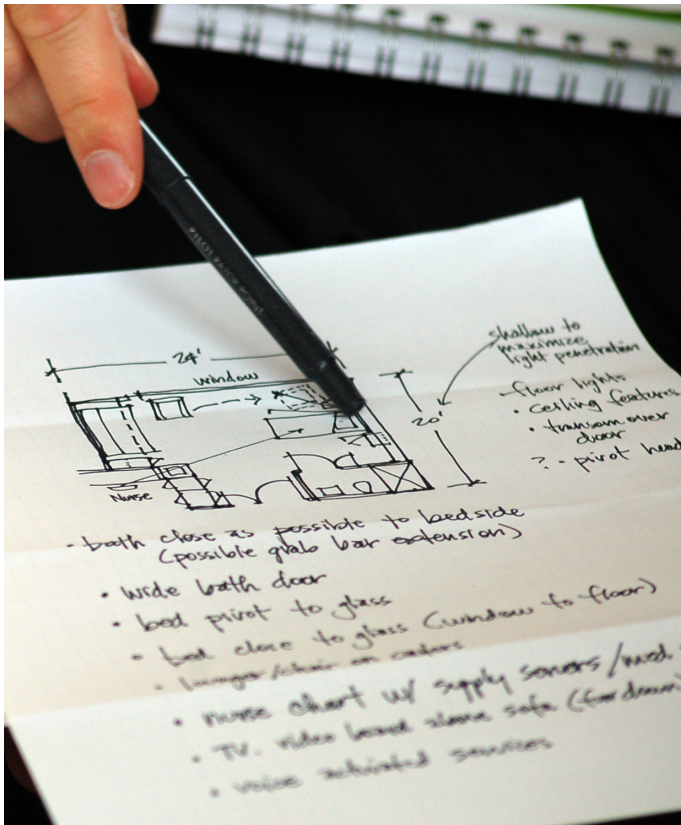
Current Trends **Facility Design**



Design Considerations

- **Decentralize** to reduce staff movement and inefficiency
- Gang violence, drug and alcohol abuse, communicable diseases, results in dangerous, high stress environment, **security issues** and concerns, and **patient segregation** as necessary

Current Trends **Facility Design**



Design Considerations

- Changing technology, equipment, and care delivery techniques drive **universal rooms vs. dedicated treatment rooms**
- Pharmaceutical therapy and genetic engineering promise to continue the evolution of healthcare delivery, including **how and where** Emergency Departments will function in the future
- **Anticipate** and plan for future growth

Current Trends **Facility Design**

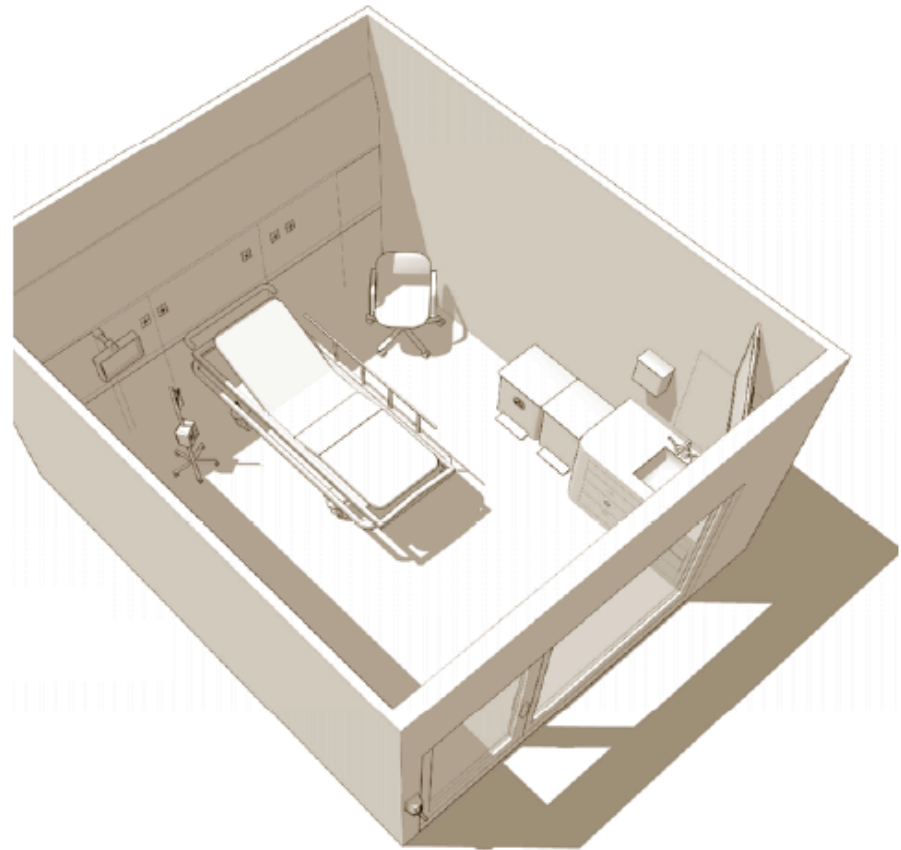
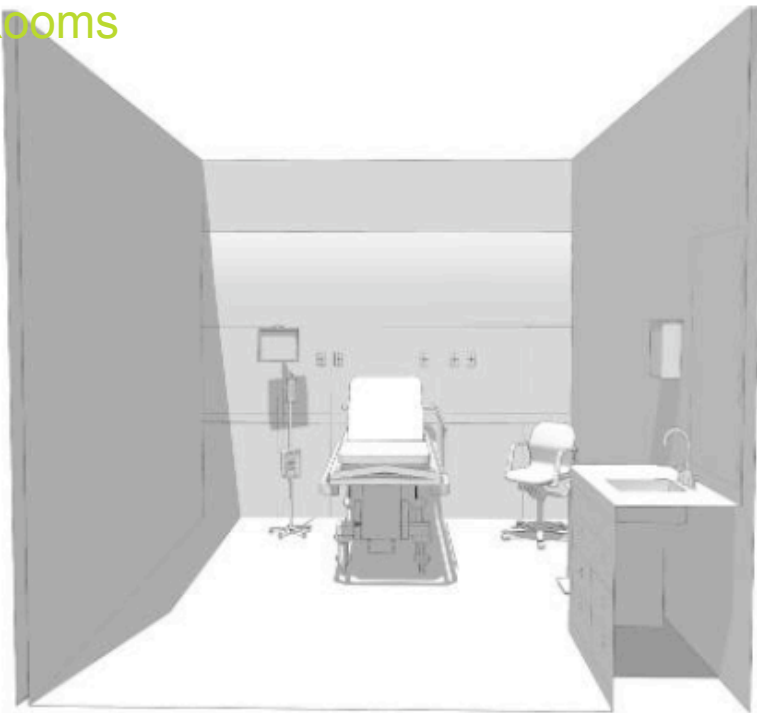
ED Organizational Concepts

1. Universal/Acuity Adaptable Room
2. High Visibility
3. Centralized and Decentralized Care

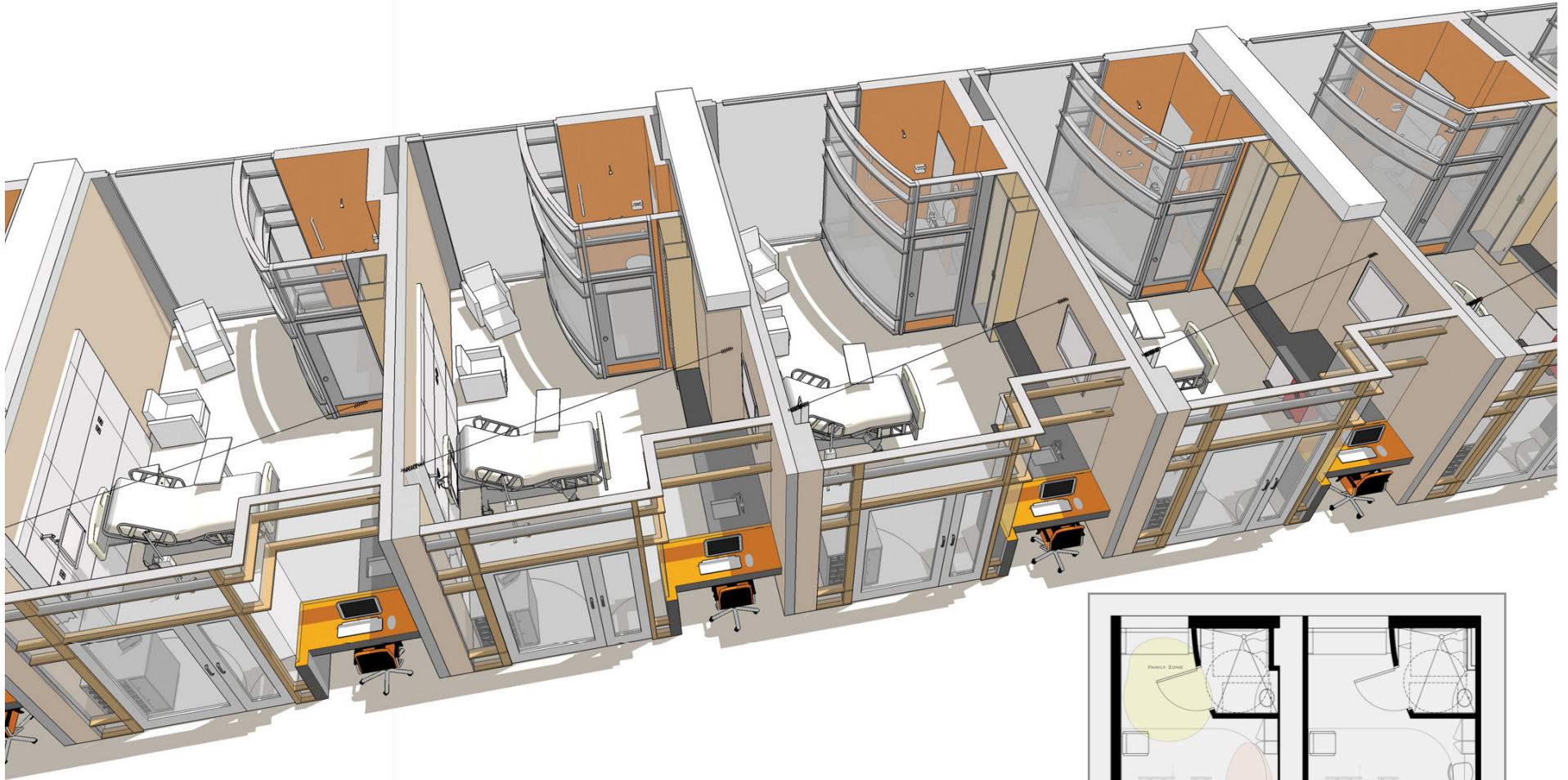


Current Trends **Space Flexibility**

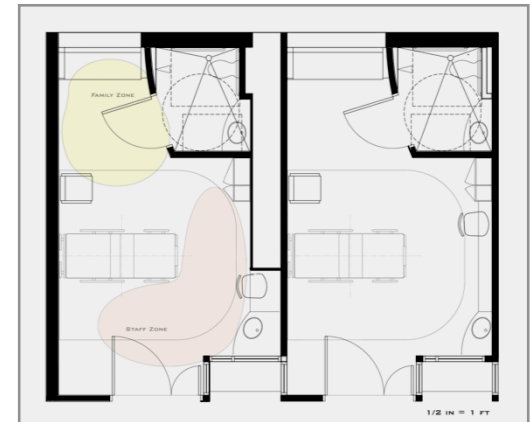
Universal / Acuity-Adaptable Rooms



Patient Safety

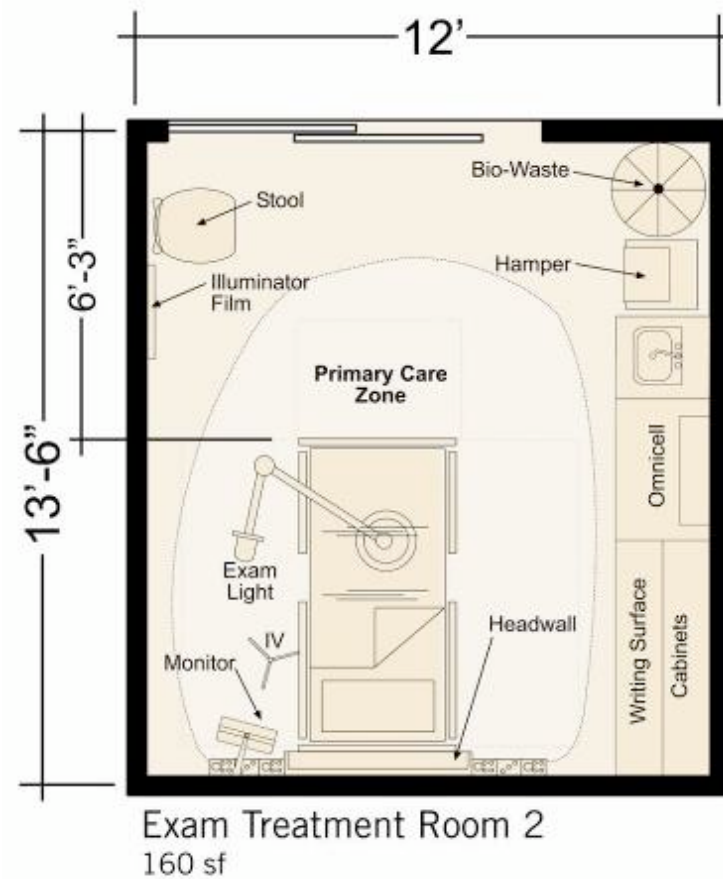
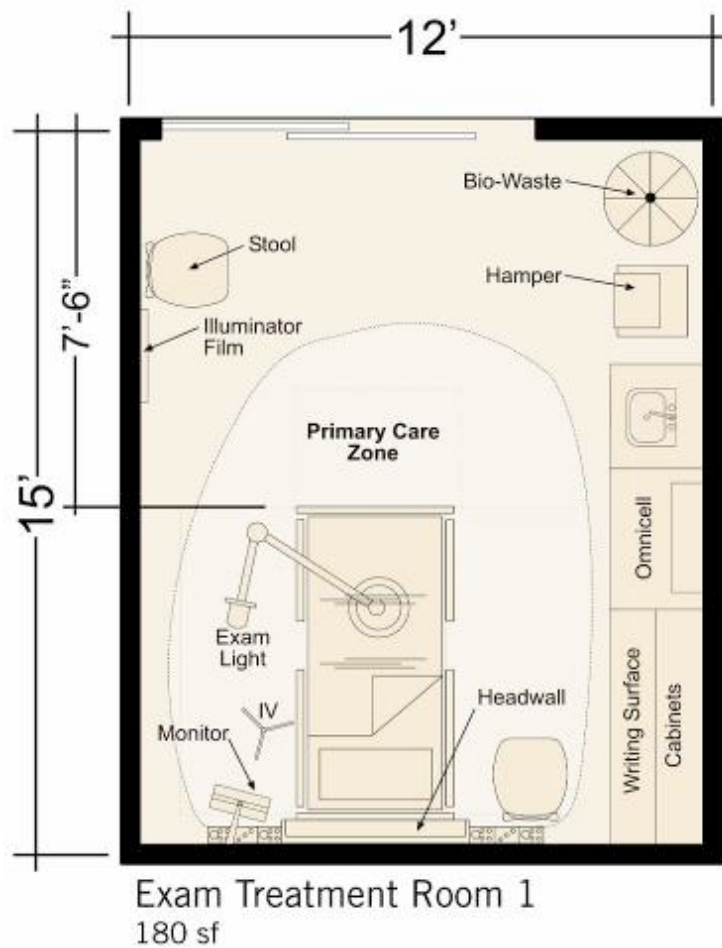


Single-Handed Patient Room vs. Mirror Image

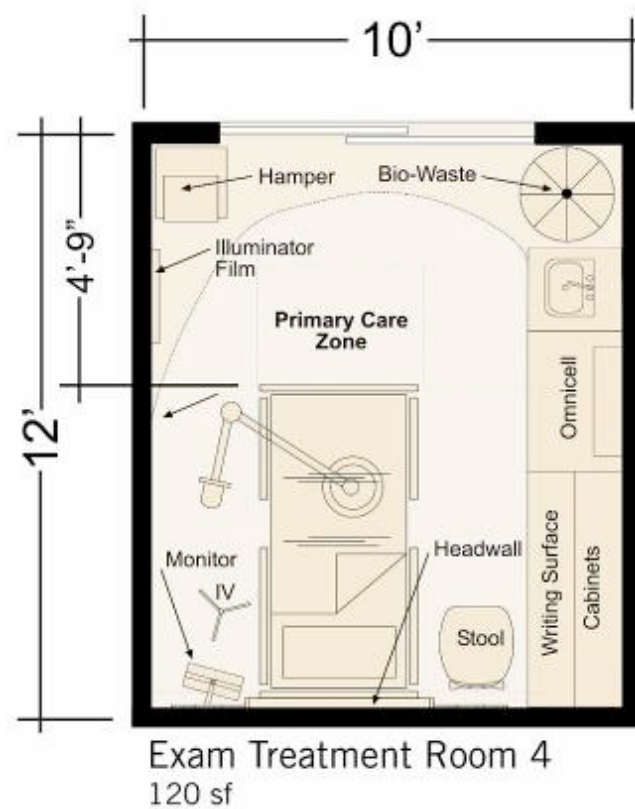
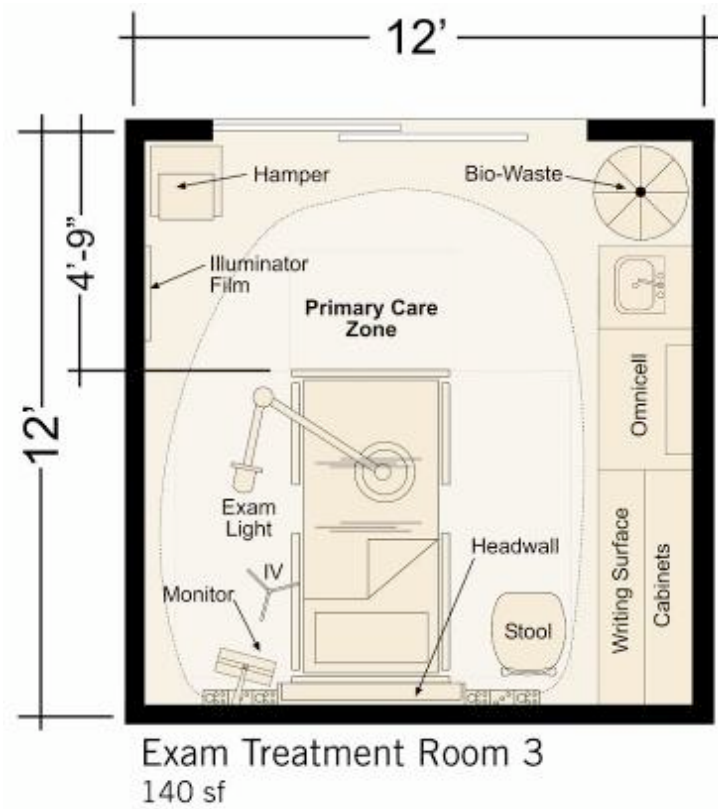


ED Typical Room Layouts

What size works
best?



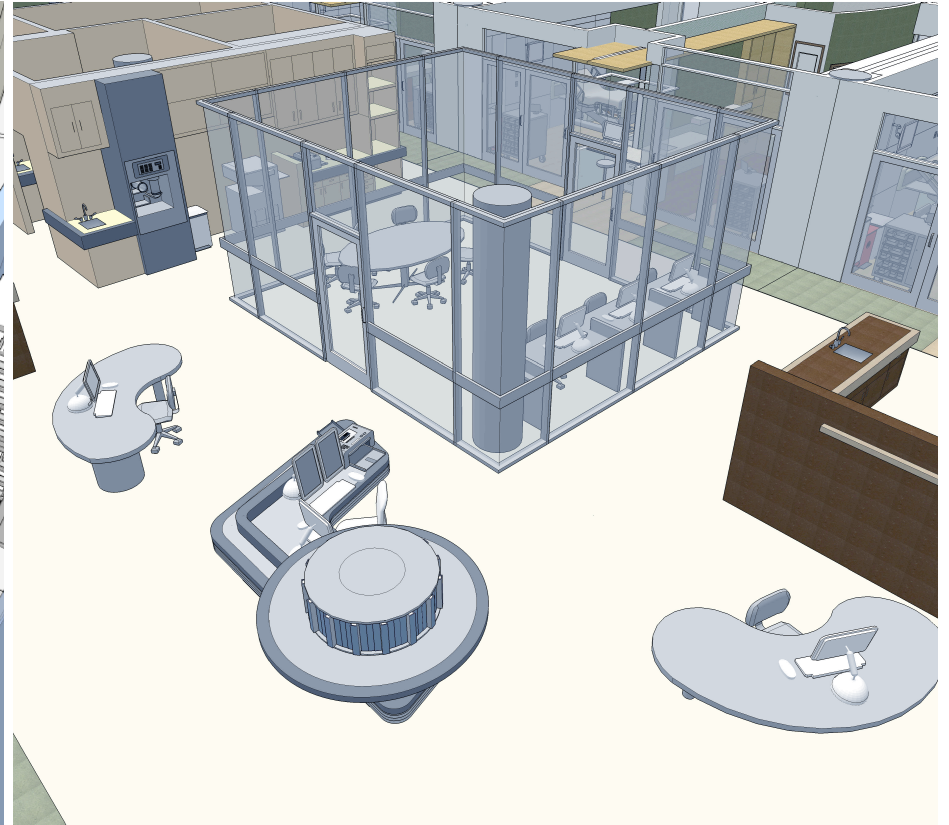
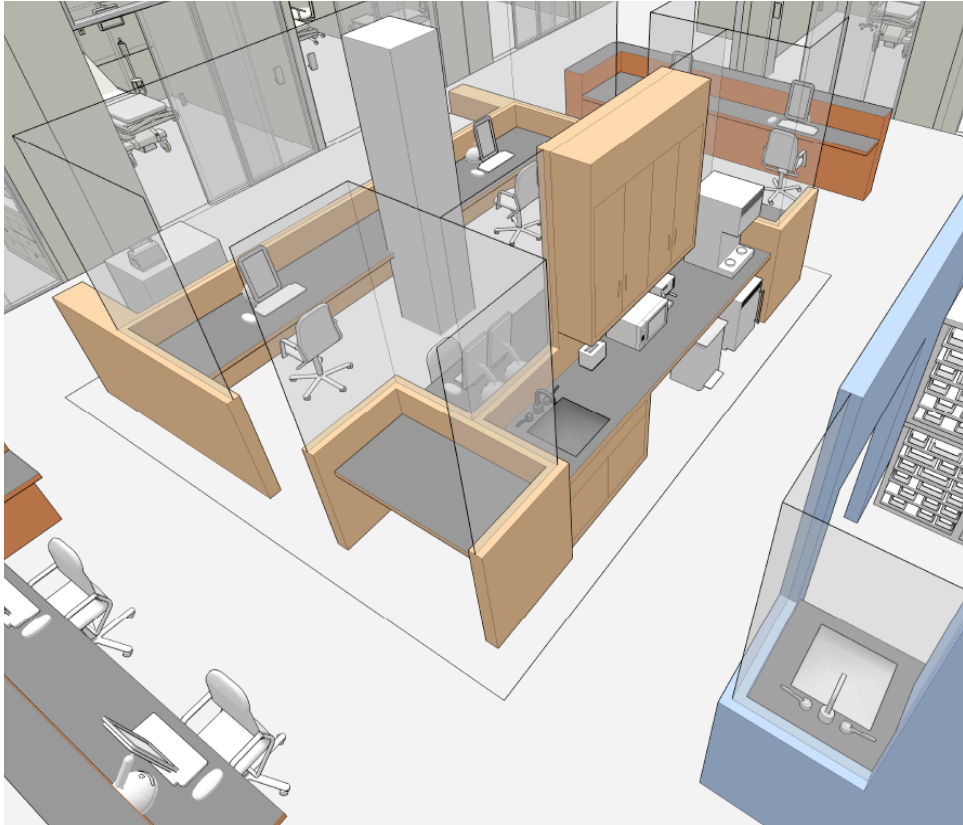
ED Typical Room Layouts



TM

What size works best?

Visualization



Closed vs. Open Work Environment

Centralized vs. Decentralized Care



Above: Decentralized Documentation Alcove

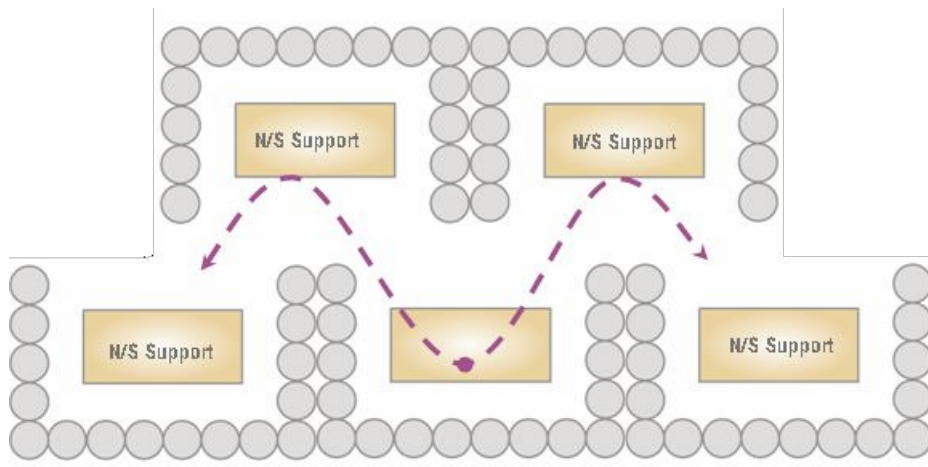


Space Flexibility

- Adaptable, flexible spaces with clear growth paths
- Today, the life-cycle of clinical services are shorter than the life-cycle of buildings in which they are contained.
- Flexibility will become the criteria by which successful health care facility designs will be measured

Current Trends **Facility Design**

Operational Planning Emergency Department



Halifax Medical Center - Serpentine Design Concept

Achieving Flexibility

- Remove Internal Boundaries Between Areas
 - Designs that Can Flex to Meet Changing Volumes
 - Avoid “compartmentalized design solutions”
- Universal Rooms

Operational Planning Emergency Department



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